

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

TECHNICAL ANALYSIS

**Proposed Administrative Civil Liability
Contained in Complaint No. R9-2002-0331**

**THE CITY OF SAN DIEGO,
AMEC EARTH AND ENVIRONMENTAL,
TRI-COUNTY DRILLING, INC.**

**NONCOMPLIANCE
WITH
CALIFORNIA WATER CODE SECTION 13267**

**Chevron Pipeline Rupture
Belt Street
San Diego, California**

November 19, 2002

by

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1.0 INTRODUCTION

The California Regional Water Quality Control Board, San Diego Region (Regional Board) issued, on November 13, 2001, an investigative order (Order; Exhibit 1a), pursuant to California Water Code (Water Code) section 13267, to the City of San Diego (City), AMEC Earth and Environmental (AMEC), and Tri-County Drilling, Inc. (Tri-County), (collectively referred to as the Dischargers). The Order required the Dischargers to submit a Preliminary Site Conceptual Model and a Workplan to conduct a soil and groundwater investigation (collectively referred to as the technical reports) to the Regional Board no later than January 25, 2002. The purpose of the requested technical reports was to develop a soil and groundwater investigation that when implemented would adequately evaluate the potential risk to the water quality of San Diego Bay, human health and the environment, from a discharge of petroleum hydrocarbon wastes. The Dischargers failed to submit the technical reports by the date required in the order. Pursuant to Water Code section 13268, a civil liability may be administratively imposed for the late submittal of a report requested under the authority of Water Code section 13267.

The Regional Board issued Complaint No. R9-2002-0331 (Complaint; Exhibit 1b) on October 23, 2002, to the Dischargers for administrative assessment of civil liability for failure to submit the technical reports. The civil liability proposed in the Complaint was \$128,000. This amount was based on a violation period extending from January 25, 2002, the day the technical reports were due, to December 11, 2002, the day of the scheduled public hearing on the Complaint. An adequate Preliminary Site Conceptual Model and Workplan were submitted by the City on November 4, 2002. Therefore, the number of days of violation was reduced to 283 days reducing the amount of the proposed civil liability to \$113,200. The rationale for the proposed civil liability amount is based on the assessment of the factors addressed in this technical analysis.

2.0 BACKGROUND

The discharge occurred when an underground fuel pipeline was ruptured. The site of the pipeline rupture is in the City of San Diego near the southern terminus of Sicard Street. The site is located within the National Steel and Shipbuilding Company (NASSCO) facility that is leased from the Port of San Diego. The underground fuel pipeline is located within a portion of Belt Street that is now located within the NASSCO facility. The site is located approximately 600 feet from San Diego Bay. Groundwater at the site most likely flows towards San Diego Bay.

Tri-County ruptured an underground gasoline pipeline during the drilling of a soil boring on February 1, 2001. Tri-County was a contractor to AMEC, a consultant hired by the City to conduct a geotechnical investigation along Belt Street. AMEC directed Tri-County to drill the soil boring at a designated location that resulted in the ruptured pipeline. The pipeline is an eight-inch diameter, steel, underground, fuel pipeline owned and operated by Chevron Products Company (Chevron). The pipeline contained unleaded gasoline at the time of the rupture. The pipeline was used to transport fuel between the upper and lower Chevron Bulk Fuel Terminals. The rupture of the pipeline caused an immediate release of an estimated 2,730 gallons of

unleaded gasoline to the surface, and into soil and groundwater. This estimate is based on the difference in fuel levels at the Chevron tank farm before and after the rupture.

Chevron collected soil samples as part of the emergency response activities. The soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd), benzene, toluene, ethylbenzene, xylenes, methyl tertiary butyl ether (MTBE), diisopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA). Samples were collected from depths ranging between 5 to 11 feet below grade. The maximum concentrations of petroleum hydrocarbons in the collected soil samples are presented in Table 1.

Table 1. Maximum Reported Concentrations for Soil Samples Collected by Chevron

<i>Constituent</i>	<i>Maximum Concentration (milligrams per kilogram)</i>
TPHg	95,000
Benzene	250
Toluene	1,900
Ethylbenzene	470
Xylenes	2,200
MTBE	2,400
TBA	250

Between February and March 2001, Chevron removed free product at the site, reducing the apparent free product thickness from approximately 36 to 1.5 inches. According to the City, no free product was measured at the site in May 2002. Because the Dischargers did not delineate the extent of free product at the time of the pipeline rupture, and have not conducted any soil and groundwater investigations to assess the current extent of free product, determining whether the free product has been effectively cleaned up, or if the free product has migrated towards San Diego Bay is not possible.

2.1 Groundwater Resources

The site is located in the Chollas Hydrologic Subarea (908.22) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). The Basin Plan does not designate any beneficial uses for groundwater in the Chollas Hydrologic Subarea and states that groundwater has been “exempted by the Regional Board from the municipal use designation under the terms and conditions of State Board Resolution No. 88-63, *Sources of Drinking Water Policy*.”

Although groundwater at the site does not have any designated beneficial uses and is exempted from designation as a source of drinking water, the Regional Board has issued interim cleanup goals for groundwater within 1,000 feet of marine surface waters (Table 2). These groundwater cleanup goals are protective of the water quality needed to support the designated beneficial uses of the marine water body should contaminated groundwater be discharged into the marine water body.

**Table 2. Interim Cleanup Goals for Groundwater
Within 1,000 Feet of a Marine Surface Water***

<i>Constituent</i>	<i>Concentration (micrograms per liter)</i>
Benzene	400
Toluene	5,000
Ethylbenzene	430
Xylenes	10,000
Naphthalene	2,350
PNAs	300

* Regional Board Supplemental Instructions to the State Water Board December 8, 1995 Interim Guidance on Required Cleanup at Low-Risk Fuel Contaminated Sites, Memorandum dated April 1, 1996.

2.2 Surface Water Resources

There are existing and potential beneficial uses of San Diego Bay designated in the Water Quality Control Plan for the San Diego Basin (Basin Plan). Those uses, which could be affected if contaminated groundwater at the site flows into San Diego Bay, include:

- Contact Water Recreation
- Commercial and Sport Fishing
- Marine Habitat
- Wildlife Habitat
- Rare, Threatened, or Endangered Species
- Shellfish Harvesting

3.0 CASE HISTORY

Beginning with the rupture of the pipeline on February 1, 2001, and ending with the submission by the City of adequate technical reports on November 4, 2002, a complete chronology of the history of the case is contained in Appendix 1. Events described in the chronology are documented in correspondence and other documents from the case file referenced as staff Exhibits 1a through 1l.

4.0 ALLEGATION

The complaint alleges that the Dischargers violated an order of the Regional Board by failing to submit adequate technical reports by January 25, 2002, pursuant to Water Code section 13267. The number of days of violation used for assessment of the ACL is the 283-day period from January 25, 2002, to November 4, 2002, the date that the technical reports were submitted to the Regional Board by the City.

The technical reports were needed to design a soil and groundwater investigation that would be adequate to assess the extent of soil and groundwater pollution, and the potential risk to human health and the environment (specifically, San Diego Bay) from the discharge of petroleum hydrocarbon wastes.

5.0 DETERMINATION OF ADMINISTRATIVE CIVIL LIABILITY

The alleged violation in the Complaint is the failure to submit technical reports required by the Regional Board pursuant to Water Code section 13267. Section 13268 imposes civil and criminal liability on any person who fails to furnish technical or monitoring reports required by a Regional Board pursuant to section 13267 and authorizes the Regional Board to assess civil liability of up to \$1,000 per day of violation pursuant to Article 2.5, commencing with section 13323, of Chapter 5 of the Porter-Cologne Water Quality Control Act.

5.1 Applicable Law

Water Code sections 13267 (a) and (b) state the following:

(a) A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person

with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports

Water Code sections 13268 (a) and (b) state the following:

(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b) (1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

The City submitted the required technical reports (Exhibit 1k) to the Regional Board on November 4, 2002, 283 days late. The maximum administrative civil liability which could be imposed by the Regional Board for this violation is \$283,000. Consideration of the statutory factors governing the imposition of civil liability supports assessment of \$200 per day of violation for each of two violations for a total civil liability of \$113,200.

6.0 FACTORS TO BE CONSIDERED IN DETERMINING THE AMOUNT OF CIVIL LIABILITY

The determination of the amount of the proposed civil liability is based on weighing several factors regarding the nature of the violation, the risk to water quality arising from the violation, and the discharger's conduct that resulted in the violation and in resolving the violation. The Water Code establishes the factors that are to be considered. The State Water Resources Control Board Water Quality Enforcement Policy (Enforcement Policy) provides guidance on how to weigh the individual factors.

Pursuant to Water Code section 13327 the Regional Board must consider the following factors in determining the appropriate amount of the liability:

The nature, circumstance, extent, and gravity of the violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic savings, if any resulting from the violations, and other matters as justice may require.

The first six factors relate to the environmental significance of the violation. The remaining factors deal with the character, actions, and economic worth of the discharger(s). These factors are discussed below (some factors have been grouped together).

The Enforcement Policy calls for the base liability to be based on the nature, circumstances, extent, and gravity of the violation, the degree of toxicity of the discharge, the susceptibility of the discharge to cleanup and abatement, and any beneficial use liability. Adjustments up or down to the base liability can be made based on the dischargers' conduct, other matters as justice may require (including staff costs), economic benefit, and ability to pay.

6.1 Nature, Circumstance, and Gravity of Violation

The nature of the violations is the failure to submit the two technical reports; a Preliminary Site Conceptual Model (PSCM) and a Workplan for site assessment. A PSCM is a document that describes the release scenario, the geologic and hydrogeologic nature of the site, the distribution of contaminants in soil, groundwater, and soil vapor, and identifies pathways and potential receptors. The importance of the PSCM is that it establishes the basis for determining the risks to potential receptors and the framework for the investigation and cleanup to be conducted at the site. The Workplan is a document that defines the scope of the investigation, and specific work tasks needed to determine the extent of contamination resulting from the pipeline rupture, the potential risks to San Diego Bay and other receptors from the suspected discharge, and the types of cleanup activities needed to protect San Diego Bay and other receptors. The PSCM and Workplan are types of documents routinely required by the Regional Board to provide technical and regulatory oversight on a cleanup. These reports are also the kinds of documents routinely prepared by environmental consulting firms, like AMEC, as part of their business.

An important circumstance of this violation is the significant expenditure of staff resources to enforce the order. The chronology in Appendix 1 documents the excessive amount of time staff spent attempting to compel the Dischargers to submit the required reports. Between February 1, 2001, (the date of the pipeline rupture) and October 23, 2002 (the date the Complaint was issued), Regional Board staff made over 30 telephone calls, attended three meetings, wrote 15 letters and e-mails, and the Regional Board issued three orders in an attempt to compel the Dischargers to begin investigation and cleanup activities at the site. The resource issue has direct bearing on the ability of the Regional Board to effectively administer its water quality programs, especially in this era of diminishing program resources. Resources spent on enforcing the order took significant resources away from the Regional Board's aboveground petroleum storage tank inspection program and implementation of the Aboveground Petroleum Storage Tank Act. The violation of a Regional Board order is a very serious offense; thus, the gravity of the violation is high.

6.2 Extent, Degree of Toxicity and Susceptibility to Cleanup or Abatement

Unlike a discharge violation, the failure to submit reports has no extent, degree of toxicity, or susceptibility to cleanup or abatement. The remedy for the violation is to submit the reports. However, the delay in submitting the reports and proceeding with investigation and any needed cleanup increased the risks that the extent of the wastes in the environment increased, that the wastes reached San Diego Bay where impairment of beneficial uses could result, and that

investigative and cleanup efforts will be more extensive, and require more oversight from the Regional Board. The failure to submit the reports is even more egregious considering that the types of reports required by the Order were not unusual. As previously noted, a Preliminary Site Conceptual Model and Workplan are typical of the kind of report routinely required by the Regional Board and prepared by environmental consulting firms such as AMEC.

6.3 Conduct of the Discharger

Factors to be considered in determining the conduct of the Dischargers include degree of culpability, any voluntary cleanup efforts undertaken, the Dischargers' cooperation in returning to compliance, and the Dischargers' prior history of violations.

6.3.1 Degree of Culpability

The amount of the civil liability should be based in part on the actions of the Dischargers that caused the violation. The amount for an accidental violation should be less than for an intentional or negligent violation. The failure to submit the two technical reports was not an act of an accidental violation, but a deliberate act by the Dischargers. The Dischargers were well aware of the requirements of the Order, and had the means to produce the technical reports. In addition, the Dischargers continued to deny responsibility for the discharge and for providing the reports required by the Regional Board. This recalcitrant determination to avoid responsibility resulted in unacceptable delays in complying with an order of the Regional Board. Additionally, the Dischargers have not acted in good faith to resolve the potential water quality problems arising from the pipeline rupture. As discussed below, their conduct suggests greater concern with protecting themselves from civil liability rather than protecting water quality. In combination, the Dischargers' deliberate violation of the Regional Board's order, denial of responsibility leading to unacceptable delays, and lack of good faith action to address water quality problems arising from the pipeline rupture merit an upward adjustment of the base liability.

Knowledge of Requirements of Investigative Order

The Dischargers were aware of the requirements of the Order including type and content of the reports required, the due dates for the reports, the potential civil liability for not submitting the reports on time, and the intention of the Regional Board to impose civil liability if the Dischargers did not comply with the Order. Further, the Dischargers were given sufficient time to prepare the reports. The Dischargers received the Order by November 17, 2001, giving them 70 days to prepare and submit the technical reports by January 25, 2002. The Regional Board routinely requires the preparation of preliminary site conceptual models and workplans within a sixty to seventy day time-period, and dischargers typically do not have difficulty producing the reports within this timeframe. Additionally, Staff's experience in preparing these types of reports indicates that approximately 80 to 90 person hours (11 days) would be needed to prepare the technical reports.

Because the Dischargers were well aware of the legal requirements to comply with the Order, the failure to submit the technical reports was not due to any misunderstanding of the requirements of the Order. Evidence that the Dischargers were aware of the requirements of the Order, the potential civil liability that the Regional Board could impose, and the intention of the Regional Board to impose civil liability is documented below:

- Certified – Return Receipts show that the Dischargers received the investigative order by November 17, 2002.
- Although the Regional Board agreed to hold an informal hearing on the issue of responsibility for investigation of the discharge associated with the pipeline rupture, the Dischargers were clearly informed in a letter dated January 4, 2002, prior to the deadline for producing the reports, that the due date for the reports was not stayed by the decision to hold an informal hearing and that Dischargers would incur liability for violation of the investigative order if, after the hearing, the Regional Board should uphold the order and the deadline of January 25, 2002.
- The Regional Board issued to the Dischargers on April 9, 2002, Order No. R9-2002-0083 (Exhibit 1e) upholding the request for the technical reports at issue here. This document was mailed “Certified – Return Receipt”. The Regional Board received return receipts indicating that the Dischargers did receive a copy of the Order. Order No. R9-2002-0083 was issued as a result of the hearing requested by the Dischargers. This Order stated:

“It is hereby ordered, that pursuant to section 13267 of the Water Code, the dischargers shall prepare and submit a Preliminary Site Conceptual Model and Workplan for a soil and groundwater investigation as directed by the Regional Board in its letter dated November 13, 2001.”

Order No. R9-2002-0083 provided additional notice to the Dischargers that the Preliminary Site Conceptual Model and Workplan were due to the Regional Board no later than January 25, 2002, pursuant to the conditions in the November 13, 2001 investigative order (Exhibit 1a) and the potential civil liabilities for non-compliance with the Regional Board’s November 2001 Order.

- The Regional Board issued a letter on May 17, 2002 (Exhibit 1i), to the City, AMEC, and Tri-County in response to AMEC's May 3rd letter. The Regional Board’s letter stated:

*“Be advised that until an adequate Workplan and Preliminary Site Conceptual Model are submitted to the Regional Board, potential civil liability against the City of San Diego, AMEC, and Tri-County Drilling continues to accrue for their failure to submit the Workplan and Preliminary Site Conceptual Model to the Regional Board by January 25, 2002. **While the Regional Board has not commenced formal enforcement action, the Executive Officer could issue a Complaint for administrative assessment of civil liability for the failure at any time [bold added for emphasis].**”*

Not only does the Regional Board's May 17th letter remind the Dischargers that the technical reports were due on January 25, 2002, the letter also notifies them that they are in violation of the investigative order, that potential civil liabilities have been accruing since January 25, 2002, and that a Complaint for administrative assessment of civil liabilities could be issued to them at any time.

- On May 6, 2002, the City sent an e-mail (Exhibit 1g) to the Regional Board regarding compliance issues with the Order. The e-mail confirms that the City was aware that the technical reports were due to the Regional Board no later than January 25, 2002.

Ability to Prepare the Technical Reports

The Dischargers degree of culpability is increased because they had several mechanisms by which to comply with the Order. An upward adjustment of the ACL is appropriate because the Dischargers could have prepared the required technical reports within the time provided by the Regional Board's November 2001 Order, or sufficiently soon following the issuance of Order R9-2002-0083 in April 2002, so that further enforcement would not have been necessary.

The City has an Environmental Services Department staffed by qualified professionals who are experienced in conducting similar soil and groundwater investigations. The Environmental Services Department has a list of qualified consultants available on an "as-needed" contract basis who could have prepared the reports. The City could have easily contracted with one of its "as-needed" consultants to prepare the Preliminary Site Conceptual Model and Workplan upon receiving the Regional Board's November 2001 Order. Based on experience in preparing these types of reports, Staff estimated that 80 to 90 person hours (11 days) would be needed to prepare the technical reports. Despite this capability, the City failed to prepare, or contract for the preparation of the necessary reports until the Regional Board contacted the Mayor's office to advise the City of the serious consequences of continued delay in responding to the Regional Board's investigative order.

AMEC is an environmental consulting firm whose capabilities include conducting soil and groundwater investigations. AMEC has a website that includes a list of its services and capabilities. AMEC's services include remedial investigation, contaminant hydrogeology, fate and transport modeling, water sampling, soil/sediment sampling, geophysical surveys, soil and water quality testing, and risk-based corrective action. The website also states that for over 45 years the San Diego office of AMEC has conducted geotechnical investigations and design and construction support services including hydrogeology, environmental assessments, and regulatory compliance. The website content indicates that AMEC could have easily prepared the Preliminary Site Conceptual Model and Workplan in-house, and at a lower cost than contracting the work out to another consultant. Further, as previously stated, the time period of 70 days to produce the report was reasonable. In spite of its capabilities, AMEC first refused to acknowledge its obligation to respond to the Regional Board's investigative order, and subsequently decided not to prepare the technical reports itself, but to rely on the City to provide the reports.

Failure to Acknowledge Responsibility for the Discharge

The Dischargers have not acknowledged their responsibility for the discharge, leading them to deliberately violate the Regional Board's Order and not undertake preparation of the required technical reports until well after the due date. The delays in preparing the reports caused by the Dischargers' refusal to accept responsibility for the discharge increased the risks of continued leaching of petroleum hydrocarbon wastes from soil to groundwater, and the continued migration of the wastes toward San Diego Bay. The pipeline was ruptured by Tri-County on February 1, 2001. In response to the rupture, Chevron conducted emergency response activities and installed and operated a remediation system at the site to cleanup free product. Chevron operated the remediation system until March 2002. There has been no follow-up by the Dischargers to the initial cleanup conducted by Chevron because the Dischargers have refused to accept responsibility for the discharge and have refused to comply with the Order issued by the Regional Board. The Dischargers' asserted reasons for denying responsibility fail to justify the prolonged delay in furnishing the required reports; the Dischargers' excuses include:

- Contractual agreements between the Dischargers indemnify them from responsibility. This cannot excuse the Dischargers' failure to provide the reports because agreements allocating responsibility among parties who are jointly and severally responsible for compliance with a regulatory order cannot shield the Dischargers from compliance with orders of the Regional Board; issues of proportional responsibility, indemnification, contribution, reimbursement, etc. are irrelevant to the Dischargers' joint and several obligation to ensure compliance with Regional Board orders and must be resolved among the Dischargers without interfering with investigations ordered by the Regional Board.
- Chevron did not register the pipeline with Underground Services Alert (USA) as required by State law. AMEC stated in a letter dated December 10, 2001, that the "discharge occurred solely due to the failure of Chevron to have registered any of its 6 underground pipelines as required by California Government Code, Section 4216." This argument does not support the contention by the Dischargers that they should not be held responsible for the consequences of their actions and negligence for the following reasons:
 - i. In the prior hearing on this case, the Regional Board found that any responsibility Chevron may have for the pipeline rupture due to its failure to register its pipeline with USA is mitigated by the fact that Chevron provided maps to the City clearly showing the location of the pipelines (Exhibit 11). These maps were provided to the City as part of a previous project conducted by the City in the Belt Street area. If the City had provided these maps to AMEC, drilling into the pipeline most likely would have been avoided.
 - ii. In the prior hearing on this case, the Regional Board found that in older, industrialized areas of San Diego registered and unregistered underground utilities are likely to be present in the subsurface. If the standard practice of care in conducting similar geotechnical investigations had been followed by Dischargers, the location of the underground pipeline would have been discovered despite Chevron's failure to

register the pipeline with USA (Exhibit 11). These practices include requesting previously conducted geotechnical studies at the site (one was conducted by the City, which included information on the location of the pipeline), and conducting a geophysical survey to locate unregistered underground utilities and subsurface features. If AMEC, as the City's geotechnical consultant, or Tri-County, had undertaken these reasonable precautions prior to locating the boring sites or drilling in a street in an industrial area where underground utilities might reasonably be expected, the Dischargers should have discovered the location of the pipeline.

Failure to Act in Good Faith

The Dischargers did not act in good faith to protect water quality from the effects of the pipeline rupture. The Dischargers failed to conduct any cleanup of the wastes following the rupture of the pipeline, and they violated an order of the Regional Board to provide the technical reports that will allow the Regional Board to evaluate the extent of the wastes from the pipeline rupture and the need for cleanup and abatement action for the discharge. Not only has the lack of good faith demonstrated by the Dischargers increased the potential risk to the beneficial uses of San Diego Bay, it has also required the Regional Board to expend significant resources on enforcement activities.

Prior to and after the issuance of the investigative order, the Dischargers spent considerable time and effort attempting to deny responsibility for the suspected discharge. Because of their denial, the Dischargers refused to follow informal direction from the Regional Board to undertake the cleanup in the summer of 2001, deliberately refused to submit the required technical reports by the ordered due date of January 25, 2002, and did not submit the reports until after several letters from the Regional Board threatening the imposition of civil liability and, finally, the Complaint were issued. The actions of the Dischargers are typical of persons more concerned with protecting themselves from liability than with protecting water quality from the consequences of their actions. However, long established public policy protects corrective actions such as those needed to investigate or cleanup and abate the effects of the pipeline rupture, from use as evidence of fault in subsequent actions for damages. The Dischargers' quick response to the situation created by their joint and several actions leading to the pipeline rupture should not be interpreted as an admission of responsibility in the inevitable proceedings between the Dischargers (and others) to allocate proportional responsibility for any damages arising out of these circumstances. Thus, the Dischargers could have complied with the directives of the Regional Board with no damage to their positions in civil court over liability resulting from the pipeline rupture.

Additionally, the City did not act in good faith once it decided to prepare the reports. An excessively long period of time was taken by the City (88 days) to approve a proposal by its new environmental consultant (Geocon) to prepare the technical reports. This long time period suggests that completion of the technical reports was not a priority to the City.

Although the City has demonstrated little good faith in complying with the investigative order, AMEC and Tri-County have demonstrated less. The City reluctantly accepted responsibility for

compliance with the Regional Board's orders and eventually prepared and submitted the technical reports. Tri-County, the Discharger that actually drilled into the pipeline and caused the rupture, did not submit any documentation to the Regional Board that it planned on complying with the order, nor has Tri-County indicated that it would cooperate with the City to submit the required technical reports on its behalf.

AMEC indicated that it would rely on the City to prepare the technical reports on AMEC's behalf despite the fact that AMEC has the in-house capabilities to prepare the required Preliminary Site Conceptual Model and Workplan more quickly than the City or any other consultant retained by the City for this purpose. Because AMEC was in the process of preparing a geotechnical investigation in the vicinity of the pipeline rupture, AMEC is positioned to have data regarding site and vicinity geology readily available. Such information would be essential for the preparation of the technical reports. Furthermore, AMEC could have done the work "at cost", thus reducing the direct costs (cost of preparing the technical reports) and indirect costs (contract management) of preparing the technical reports.

6.3.2 Voluntary Cleanup and Cooperation

Voluntary cleanup efforts at the site were conducted by Chevron Products Co., and not by the Dischargers. In fact, the Dischargers' refusal to undertake investigation and cleanup actions when informally directed by the Regional Board to do so compelled the Regional Board to issue the order requiring the technical reports. The Dischargers have been uncooperative in returning to compliance, taking 283 days to submit the required reports after violating the order. Ultimately, the City submitted the reports on November 4, 2002. However, AMEC and Tri-County exhibited no cooperation at all. An upward adjustment to the base liability is appropriate to reflect the lack of voluntary cleanup efforts and the lack of cooperation to return to compliance.

6.3.3 Prior History of Violations

Other than violation of the Basin Plan prohibition against the unauthorized discharge of petroleum hydrocarbon waste from the ruptured pipeline, the violation for failing to submit technical reports is the only known violation of AMEC and Tri-County. In addition to these violations, the City has a long history of sewage spills to surface waters in violation of the Basin Plan and Order No. 96-04 governing discharges from sanitary sewer systems. Between 1990 and 2002 the Regional Board issued nine civil liabilities against the City for violations relating to sewage spills. The City's tactics in the case of the pipeline rupture are consistent with its tactics regarding sewage spills. In both situations, the City did not take action to correct the problems until after the Regional Board initiated formal enforcement for violation of water quality orders. The prior history of violations by the City justifies an upward adjustment to the base liability.

6.3.4 Economic Savings

The two violations were for failure to submit technical reports. The economic savings to the Dischargers would be the cost of preparing the technical reports. These documents have been submitted, so the violation has not resulted in an economic savings to the Dischargers. Therefore, there is no need to make an upward adjustment to the base liability.

6.3.5 Ability to Pay the ACL

The fiscal year 2002 budget for the City is over \$2,000,000,000. Thus, the City has the ability to pay the civil liability. AMEC is a large, international consulting firm. There is no evidence that AMEC does not have the ability to pay the civil liability and remain in business. Tri-County is a local drilling company. There is no evidence that Tri-County does not have the ability to pay the civil liability and remain in business. Therefore, there is no need to make a downward adjustment to the civil liability based on ability to pay.

6.3.6 Other Matters as Justice May Require

Other factors that were considered in setting the amount of the civil liability include recovery of Regional Board staff costs associated with the preparation of the Complaint.

Regional Board Staff Costs

Since October 2002, the Regional Board has been compelled to spend an estimated 280 hours to investigate and consider action regarding this matter. At an average rate of \$80 per hour, \$22,400 of Regional Board resources has been expended as follows:

Table 3. Regional Board Staff Costs

Staff	Number of Hours
Associate Engineering Geologist	200
Senior Engineering Geologist	50
Executive Officer	10
Staff Counsel	20
<i>Total Hours</i>	<i>280</i>
Average Hourly Cost	\$80/hour
<i>Total Recoverable Staff Costs</i>	<i>\$22,400</i>

7.0 MINIMUM AND MAXIMUM CIVIL LIABILITY AMOUNTS

Pursuant to Water Code section 13268 the maximum civil liability that the Regional Board may assess is one thousand dollars (\$1,000) for each day of violation. A 283-day period of violation from January 25, 2002, to November 4, 2002, is being used for assessing the total amount of the liability. The following table summarizes the minimum and maximum civil liabilities that may be issued to the Dischargers.

Table 4. Potential Minimum and Maximum Civil Liabilities

Violation	Days of Violation	Liability	
		Minimum	Maximum
Failure to submit a technical report pursuant to Water Code section 13267	283	\$0	\$283,000

8.0 PROPOSED CIVIL LIABILITY PER VIOLATION

The amount of civil liability recommended for the Dischargers' failure to submit required technical reports was calculated in accordance with guidelines presented in the State Water Resources Control Board's Water Quality Enforcement Policy. The proposed amounts of civil liability are as follows:

- Violation 1 – Failure to submit a Preliminary Site Conceptual Model - \$200 per day for 283 days for a total of \$56,600.
- Violation 2 – Failure to submit a Workplan - \$200 per day for 283 days for a total of \$56,600.
- Total for Violation 1 and 2 - \$113,200.

8.1 Comparison of Proposed Civil Liability to SWRCB Guidance to Implement the Water Quality Enforcement Policy, Assessment Matrix

The SWRCB Guidance to Implement the Water Quality Enforcement Policy contains an Assessment Matrix as shown below. The matrix ranks the Compliance Significance (Discharger) and Environmental Significance (Discharge) as "Minor," "Moderate" or "Major." Based upon the determination of the two categories, a range of civil liability is provided. This matrix assists the Regional Board in determining, after a consideration of the factors in section 6.0, whether the proposed civil liability is appropriate.

Table 5. Assessment Matrix

<i>Compliance Significance (Discharger)</i>	<i>Environmental Significance (Discharge)</i>		
	<i>Minor</i>	<i>Moderate</i>	<i>Major</i>
<i>Minor</i>	\$100 - \$2,000	\$1,000 - \$20,000	\$10,000 - \$100,000
<i>Moderate</i>	\$1,000 - \$20,000	\$10,000 - \$100,000	\$50,000 - \$200,000
<i>Major</i>	\$10,000 - \$100,000	\$50,000 - \$200,000	\$100,000 to maximum amount

Compliance Significance refers to the Dischargers' conduct in failing to comply with the investigative order. Failure to submit the Preliminary Conceptual Model and Workplan for an unauthorized discharge of wastes capable of causing pollution and contamination are considered a "Major" Compliance Significance for the following reasons:

- The failure to submit these two technical reports constitutes two separate violations of the investigative order.
- The two violations are due solely to the Dischargers deliberate failure to submit the technical reports on time.
- The reports are 283 days late. This unreasonable delayed prevented a timely investigation of the discharge that would have provided the Regional Board with the information needed to assess risks to the beneficial uses of San Diego Bay, and to determine the appropriate activities to cleanup the discharge.
- The Regional Board has expended considerable resources pursuing enforcement of the order for the technical reports.
- The conduct factors of the Dischargers justify a higher ACL amount.

The Environmental Significance is considered "Moderate" because the discharge of petroleum hydrocarbon wastes are a potential risk to human health and the environment and are capable of causing contamination as well as pollution and nuisance, and because a quick response was needed by the Dischargers to clean up the discharge and to provide the Regional Board with the information needed to determine whether the cleanup activities are sufficient to protect water quality, human health and the environment. Using the matrix, the range of a civil liability for a "Major" Compliance Significance rank with a "Moderate" Environmental Significance rank is \$50,000 - \$200,000. The proposed civil liability of \$113,200 is within the matrix range.

9.0 TOTAL PROPOSED ADMINISTRATIVE CIVIL LIABILITY

The total proposed civil liability for the two violations in this matter is \$113,200.

APPENDIX 1

CASE HISTORY CHRONOLOGY

- Feb. 1, 2001 Tri-County Drilling, Inc. (Tri-County) ruptured An underground gasoline pipeline was during the drilling of a soil boring by on February 1, 2000.
- In response to the release of gasoline from the pipeline as a result of the rupture, Chevron notified the City of San Diego Fire Department (SDFD), United States Dept of Fish and Game, and the United States Coast Guard. The City (via the SDFD) was the first responder to the incident and contained the spill by placing a dike around the spill area and placing a foam blanket over the spill to mitigate the fire and explosion hazard. Additionally, Chevron mobilized a vacuum truck to remove gasoline in the immediate vicinity of the release.
- Feb. 2, 2001 Regional Board staff conduct a site visit to observe and document conditions at the site of the pipeline rupture.
- Feb. 7, 2001 The County of San Diego Department of Environmental Health (DEH) notified the Regional Board that Chevron had indicated a willingness to submit an application to enter the voluntary assistance program (VAP) with DEH. Under the terms of the VAP, the DEH would be the lead agency and provide technical oversight for the cleanup.
- Feb. 8, 2001 James Bryson of Harding ESE, the consultant for Chevron, notified the DEH that Chevron would not enter the VAP because they weren't the party responsible for the discharge of petroleum hydrocarbon wastes from the pipeline.
- Feb. 21, 2001 Chevron gave the City official notice that because neither the City nor AMEC took responsibility for the release, Chevron undertook emergency measures to protect surrounding properties and San Diego Bay, and that because emergency measures were no longer needed, the City would have to conduct additional work to complete the assessment and cleanup.
- Mar. 6, 2001 Product recovery stopped on March 2, 2001. As of March 6, 2001, the interim remedial action conducted by Chevron removed 786 gallons of vapor phase and 795 gallons of free product from the environment.
- April 17, 2001 Chevron notified the City that Chevron undertook emergency response to limit the spread of hydrocarbon contamination because it had the expertise to do so and to mitigate any loss due to the shut down of the fuel terminal.
- July 20, 2001 Meeting with the City, AMEC, and the Regional Board. The Regional Board notified the City and AMEC that the Regional Board would issue a Cleanup and Abatement Order requiring the City and AMEC to cleanup the discharge

from the pipeline rupture. The City claimed that Chevron was responsible for the discharge because the pipeline was not registered with Underground Service Alert and asked the Regional Board not to issue an order. Staff agreed to consult with the Regional Board attorney on the issue of responsibility for the discharge.

- July 27, 2001 Letter report by TRC (the consultant for Chevron) titled "Emergency Response and Remedial Action Report" submitted to the Regional Board. TRC concluded that the lateral and vertical extent of soil contamination, and the lateral and vertical extent of groundwater contamination had not been assessed.
- Nov. 13, 2001 After consulting with counsel, the Regional Board issued an investigative order (Exhibit 1a) pursuant to Water Code section 13267 to the City, AMEC, and Tri-County directing them to prepare a Preliminary Site Conceptual Model and a Workplan to conduct a soil and groundwater investigation. These documents were to be received by the Regional Board no later than January 25, 2002.
- Nov. 29, 2001 The Regional Board issued a letter to the City, AMEC, and Tri-County requesting that they enroll in the Aboveground Petroleum Storage Tank Cost Recovery Program for reimbursement of oversight costs.
- Dec. 10, 2001 AMEC and the City submitted separate letters to the Regional Board requesting that a hearing be held regarding whether AMEC and the City were properly identified as Dischargers in the order and if the burden of reports bore a reasonable relationship to the need for the reports.
- Dec. 17, 2001 Chevron submitted a Workplan to the Regional Board to conduct a soil and groundwater investigation in the vicinity of the pipeline rupture.
- Jan. 4, 2002 The Regional Board issued a notice (Exhibit 1c) to the City, AMEC, Tri-County and interested parties that an informal hearing on the responsibility for the cleanup of waste discharged from the ruptured pipeline would be held.
- Jan. 8, 2002 The Regional Board issued a letter (Exhibit 1d) to the Dischargers stating that the Workplan submitted by Chevron did not comply with the requirements of the investigative order. The letter provided details as to what was needed to comply with the investigative order, and stated that the January 25, 2002 date for receipt of an adequate Preliminary Site Conceptual Model and Workplan was still in effect, even though the Regional Board agreed to hold a hearing on the issue of responsibility for the discharge.
- April 9, 2002 Regional Board issued Order No. R9-2002-0083 (Exhibit 1e), affirming the directive for technical reports from the City, AMEC, and Tri-County, and

- ordered the same to submit the Preliminary Site Conceptual Model and Workplan as required in the November 13, 2001 investigative order.
- April 26, 2002 Regional Board submitted a letter (Exhibit 1f) to the City, AMEC, and Tri-County again requesting that they enter in to the Cost Recovery Program, notifying them that the Preliminary Site Conceptual Model was overdue, and that potential civil liabilities were accruing for each day that the documents were overdue.
- May 6, 2002 The City acknowledged, via e-mail (Exhibit 1g), that the due date for the technical reports had not been changed from the January 25, 2002 deadline, and that the Regional Board would issue an ACL if positive progress was not made regarding the submission of the reports.
- May 14, 2002 The City issued a letter (Exhibit 1h) to the Regional Board stating that they would provide the Preliminary Site Conceptual Model and Workplan to the Regional Board.
- May 17, 2002 The Regional Board notified the Dischargers in writing (Exhibit 1i), that until an adequate Preliminary Site Conceptual Model and Workplan were submitted to the Regional Board, the Dischargers continued to accrue potential administrative civil liabilities and that the Regional Board might issue an ACL Complaint at any time.
- June 13, 2002 Geocon Consultants, Inc. (Geocon) submitted a proposal to the City to prepare a Preliminary Site Conceptual Model and Workplan.
- Aug. 13, 2002 Geocon submitted a revised proposal to the City to prepare a Preliminary Site Conceptual Model and Workplan.
- Aug. 26, 2002 The City approved the revised proposal (Exhibit 1j) by Geocon to prepare a Preliminary Site Conceptual Model and Workplan.
- Sept. 12, 2002 Geocon notified the Regional Board by e-mail that they had not yet completed the preparation of the Preliminary Site Conceptual Model and Workplan, but the technical reports would be submitted to the Regional Board by mid-October.
- Oct. 23, 2002 The Regional Board issued the Complaint (Exhibit 1b) to the City, AMEC, and Tri-County.
- Nov. 4, 2002 The City submitted an adequate Preliminary Site Conceptual Model and Workplan (Exhibit 1k) to the Regional Board.